



Effective Health Care

Fetal Surgery

Nomination Summary Document

Results of Topic Selection Process & Next Steps

- Fetal surgery will go forward for refinement as a technical brief because most of the available evidence is in the form of case reports and case series. The scope of this topic, including populations, interventions, comparators, and outcomes, will be further developed in the refinement phase.
- To see a description of a technical brief, please go to <http://effectivehealthcare.ahrq.gov/index.cfm/research-for-policymakers-researchers-and-others/>.
- As this topic is developed into a technical brief, key questions will be drafted and posted on the AHRQ Web site. To sign up for notification when this and other Effective Health Care Program topics are posted, please go to <http://effectivehealthcare.ahrq.gov/index.cfm/join-the-email-list1/>.

Topic Description

Nominator: Public payer

Nomination Summary: The nominator is interested in *in utero* surgical correction of fetal abnormalities compared to surgical correction after birth.

Population(s): Fetuses with documented abnormalities on ultrasound which would require surgical correction

Intervention(s): *In utero* surgical correction of abnormality

Comparator(s): Surgical correction of abnormality after birth

Outcome(s): Which group has better outcomes (immediate and future morbidity), specific abnormalities which show an advantage of fetal surgery vs. immediate surgery after delivery

Key Questions from Nominator: Which intervention has better outcomes?
Are there specific abnormalities that show an advantage of fetal surgery vs. immediate surgery after birth?

Considerations

- The topic meets all EHC Program selection criteria. (For more information, see <http://effectivehealthcare.ahrq.gov/index.cfm/submit-a-suggestion-for-research/how-are-research-topics-chosen/>.)

- During the refinement process, it was determined that this topic may be more appropriate for a technical brief rather than a comparative effectiveness review because most of the evidence is in the form of case reports and case series.

- Additional feedback from the nominator provided more information about the types of surgeries and outcomes of most interest.
 - Types of surgeries: open fetal surgery, fetoscopic surgery, laser ablation
 - Outcomes (in addition to those listed above under Nomination Summary): mortality (intra-operative, intra-partum, neonatal), preservation of organ system function [cardiac, renal, pulmonary, neurologic (depending on the abnormality involved)]

- No comparative effectiveness review evaluating the harms and benefits of *in utero* versus surgical correction after birth was identified. Several narrative reviews on the topic suggest that despite the move toward widespread use of the *in utero* therapeutic approach, questions of risk versus benefit posed to the fetus and mother remain for many of the procedures.

- Although several trials sponsored by the National Institutes of Health are underway to evaluate some of the most common fetal surgeries, most data regarding fetal surgery come from case studies.